

050345

## SEQUENCE LISTING

<110> NAGOYA INDUSTRIAL SCIENCE RESEARCH INSTITUTE  
YOSHIOKA, Hirofumi

<120> Pathogen-responsive promotor

<130> P0206402

<150> JP P2002-351701

<151> 2002-12-03

<150> JP P2003-294409

<151> 2003-08-18

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<170> PatentIn version 3.1

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<213> Solanum tuberosum

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 <213> Solanum tuberosum

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Val	Tyr	Lys	Val	Leu	His	Arg	Pro	Thr	Gly	Arg	Leu	Tyr	Ala	Leu	Lys
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100

105

110

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Glu Ile Glu Ile Leu Arg Asp Val Asp Asn Pro Asn Val Val Arg Cys  
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Met Asp Lys Gly Ser Leu Glu Gly Ile His Ile Pro Leu Glu Gln Pro  
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Leu Ser Asp Leu Thr Arg Gln Val Leu Ser Gly Leu Tyr Tyr Leu His  
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Arg Arg Lys Ile Val His Arg Asp Ile Lys Pro Ser Asn Leu Leu Ile  
 195 200 205

Asn Ser Arg Arg Glu Val Lys Ile Ala Asp Phe Gly Val Ser Arg Val  
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Leu Ala Gln Thr Met Asp Pro Cys Asn Ser Ser Val Gly Thr Ile Ala  
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Tyr Met Ser Pro Glu Arg Ile Asn Thr Asp Leu Asn His Gly Gln Tyr  
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Asp Gly Tyr Ala Gly Asp Ile Trp Ser Leu Gly Val Ser Ile Leu Glu  
 260 265 270

Phe Tyr Leu Gly Arg Phe Pro Phe Ser Val Gly Arg Gln Gly Asp Trp  
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Ala Ser Leu Met Cys Ala Ile Cys Met Ser Gln Pro Pro Glu Ala Pro  
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Pro Thr Ala Ser Arg Glu Phe Arg Glu Phe Ile Ala Cys Cys Leu Gln  
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Arg Asp Pro Ala Arg Arg Trp Thr Ala Ala Gln Leu Leu Arg His Pro  
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Phe Ile Thr Gln Asn Ser Pro Gly Thr His Thr Gly Pro Ala Thr Thr  
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35 40 45

Val Ala Leu Ala Val Pro Leu Pro Leu Pro Pro Thr Ser Ala Pro Ser  
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Ser Ser Ser Ser Ser Ser Ser Ser Pro Leu Pro Thr Pro Leu His Phe  
65 70 75 80

Ser Glu Leu Glu Arg Val Asn Arg Ile Gly Ser Gly Thr Gly Gly Thr  
85 90 95

Val Tyr Lys Val Leu His Arg Pro Thr Gly Arg Leu Tyr Ala Leu Lys  
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Val Ile Tyr Gly Asn His Glu Asp Ser Val Arg Leu Gln Met Cys Arg  
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Glu Ile Glu Ile Leu Arg Asp Val Asp Asn Pro Asn Val Val Arg Cys  
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Met Asp Lys Gly Ser Leu Glu Gly Ile His Ile Pro Leu Glu Gln Pro  
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Arg Arg Lys Ile Val His Arg Asp Ile Lys Pro Ser Asn Leu Leu Ile  
195 200 205

Asn Ser Arg Arg Glu Val Lys Ile Ala Asp Phe Gly Val Ser Arg Val  
210 215 220

Leu Ala Gln Asp Met Asp Pro Cys Asn Asp Ser Val Gly Thr Ile Ala  
225 230 235 240

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Tyr Met Ser Pro Glu Arg Ile Asn Thr Asp Leu Asn His Gly Gln Tyr  
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Asp Gly Tyr Ala Gly Asp Ile Trp Ser Leu Gly Val Ser Ile Leu Glu  
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Phe Tyr Leu Gly Arg Phe Pro Phe Ser Val Gly Arg Gln Gly Asp Trp  
275 280 285

Ala Ser Leu Met Cys Ala Ile Cys Met Ser Gln Pro Pro Glu Ala Pro  
290 295 300

Pro Thr Ala Ser Arg Glu Phe Arg Glu Phe Ile Ala Cys Cys Leu Gln  
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Arg Asp Pro Ala Arg Arg Trp Thr Ala Ala Gln Leu Leu Arg His Pro  
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Phe Ile Thr Gln Asn Ser Pro Gly Thr His Thr Gly Pro Ala Thr Thr  
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<213> Artificial

<220>

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<223> primer for RT-PCR

<400> 16  
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<210> 17  
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<220>  
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<400> 17  
aggacattgt tcgacctgtt 20

<210> 18  
<211> 20  
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<220>  
<223> primer for RT-PCR

<400> 18  
tctccatgag tccttacatg 20

<210> 19  
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<212> DNA  
<213> Artificial

<220>  
<223> primer for RT-PCR

<400> 19  
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<210> 20  
<211> 25  
<212> DNA  
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<220>  
<223> primer for RT-PCR

<400> 20  
aataatgata caaaataaat taagg 25

<210> 21  
<211> 2231  
<212> DNA  
<213> Solanum tuberosum

<400> 21  
atggccctag ctatcccctt taacaatgaa gaggagattg ttcgccctgt tgccaatttc 60

tctccaagtc tttgggggtga tcgtttccat tcattctctc tcgacaatca ggtaattact 120

## 050345

taattaatta ctaattaaat ccttctctat cgcttatatt tggtaaatta ctactaatcc	180
caatcatgaa cattttacag gttgctgaaa agtatgctca agagattgaa actttgaagg	240
aacaaacaag gagtttggtg tctgctgctg cttgtggaat aacattggct gagaaattga	300
atctgataga cattgttgag cgccttggct tagcttatca ttttgagaaa caaatagatg	360
atatgttgga tcaaatttac aaagcagatc ccaactttga cgctcatgat ttaaacactt	420
tatcccttca atttcgaata ttaagacaac atgggttaca tatctcccaa agtaggtcca	480
tcatttaaaa caattcacca aaataatacg ttttttctg catgaaaact aattatcttt	540
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taaggactca tggagaagat attttagaag aggcacttgt tttctccact gctcatcttg	720
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agtctctcca taagagcatt ccaagagtcg agacgcgcta cttcatctcc atctacgaag	840
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agatgttgca caaacacgaa cttagtgaag tatcaaggta tacagatgtg ttaagttgaa	960
ttaaaaatac tagtataaat tatttggtga tagtaatttc taagattggg acttattttg	1020
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gttgatgaca tagcaacgta tgaggtaatt agcatcgcat tacactacat aaatcatctt	1860
ataatttaga gttacagtaa tttaatacaa attgatttca catacttata aatgaattat	1920
aattgccatt ccagggttgag aagggtaggg gccaaatcgc aacaggaatt gagtggtata	1980

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tgagggatta tgacgtatca acagaagtag caatggaaaa attccaagag atggctgaga	2040
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ttactcgcatt tctcaatctt gctcgtatta tagatgtcac ttacaagcac aatcaagatg	2160
gatacactca tcccgaaaaa gttctaaaaac ctcacatcat tgctttactg gtggactcca	2220
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<210> 22  
 <211> 1337  
 <212> DNA  
 <213> Solanum tuberosum

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agacggaaac aatagcattg gatcaagaca gacgccattg aaggaagaaa aaacctaataa	180
aaataaaca aaggagagac actttcttgg tcccttcgag gccatatatc ccattaatat	240
aaaaatataa aacaaaaaaa aagacagacg gtcgccaag gaaagaaggc ggacgtcact	300
aacggctaac cctaactaca aataatgtaa ttttcaaaa acggaactat aaggaataaa	360
aaacatgaag attattgagt attattaatt tttaaaagac agacgccact cgaggaaata	420
aggaatcaca aggagtaaag aaagaaatta aaggcacgtt acagtatcat ataataaaa	480
tttaagtttg gttgcattga agttatatag tttttaaaaa aaaataaaat tgtccaacaa	540
tacttggtcca atttagaaaa tctaaaagat aattttattat tttgtgtttg ttttacctca	600
acatctaata cttttctcaa attattaaat ttaatatatt caaaaggtaa tatagtaata	660
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tcgttgaatt aaggaggatc catcaaagaa attgatttat aacacgatgc ggggtggaggg	780
agctagaaag ttagtacaata tttggttgca ctaagtactt catccgtctc aatttatgag	840
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tgtccacctt actcaattaa taaaatatta attaaagttt ttctatacta gatataaaaa	1080
tgttattatt atttttgata aagactagaa agagtatact atttgtatat ctacagtggg	1140
acgaccagtt aagtatattg tagtcaaagt aaggcaaccg gatggactgc atgcagcaca	1200
aaggctctca ccactataaa tactcaatat tccttctctt tcatttccat caacaccttc	1260
accaactaac aaattaaaag aaagaaaaaa aaatctctca gtttcctcac aagctaatta	1320
gacccgtttc cgaagaa	1337

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<210> 23  
<211> 50  
<212> DNA  
<213> Solanum tuberosum

<400> 23  
gtccgccctt actattccca tccgatctct tgggaagcgg gggagaaaat 50

<210> 24  
<211> 1287  
<212> DNA  
<213> Solanum tuberosum

<400> 24  
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ttcaagttga agacggaaac aatagcattg gatcaagaca gacgccattg aaggaagaaa 120  
aaacctaataa aaataaaca aaggagagac actttcttgg tcccttcgag gccatatatc 180  
ccattaatat aaaaatataa aacaaaaaaaa aagacagacg gtcgccaag gaaagaaggc 240  
ggacgtcact aacggctaac cctaactaca aataatgtaa ttttcaaaa acggaactat 300  
aaggaataaa aaacatgaag attattgagt attattaatt tttaaaagac agacgccact 360  
cgaggaaata aggaatcaca aggagtaaag aaagaaatta aaggcacgtt acagtatcat 420  
ataatataaa ttttaagttg gttgcattga agttatatag tttttaaaaa aaaataaaat 480  
tgtccaacaa tacttgtcca atttagaaaa tctaaaagat aatttattat tttgtgtttg 540  
ttttacctca acatctaata catttctcaa attattaaat ttaatatatt caaaaggtaa 600  
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aatttatgag attttgtttg attcgagacg aaatttaata aagatgattt ttttaaagtt 840  
gtaatctaaa acaagtcata aatatttgca tcactataat aatctcatta aatgtaaag 900  
aatattttta gctaaattat tactactccc tccatgtcca tattagttga tcactttact 960  
atatattaac tgtccacctt actcaattaa taaaatatta attaaagttt ttctatacta 1020  
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ctacagtggg acgaccagtt aagtatattg tagtcaaagt aaggcaaccg gatggactgc 1140  
atgcagcaca aaggctctca ccactataaa tactcaatat tccttctctt tcatttccat 1200  
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aagctaatta gacccgtttc cgaagaa 1287

<210> 25  
<211> 30

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<212> DNA  
<213> Artificial

<220>  
<223> primer for PCR

<400> 25  
cggaattcctt gtaatcctta tttaggatta

30

<210> 26  
<211> 30  
<212> DNA  
<213> Artificial

<220>  
<223> primer for PCR

<400> 26  
cggaattcgt ccgcccttac tattcccatc

30

<210> 27  
<211> 30  
<212> DNA  
<213> Artificial

<220>  
<223> primer for PCR

<400> 27  
cggaattcctt tataatagtg cactcatgct

30

<210> 28  
<211> 30  
<212> DNA  
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<220>  
<223> primer for PCR

<400> 28  
cggaattcgc tatatTTTTT caagttgaag

30

<210> 29  
<211> 30  
<212> DNA  
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<220>  
<223> primer for PCR

<400> 29  
cggaattcga cgccattgaa ggaagaaaaa

30

<210> 30  
<211> 30  
<212> DNA  
<213> Artificial



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<220>  
<223> primer for PCR

<400> 30  
cggaattcac tttcttggtc ccttcgaggc 30

<210> 31  
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<220>  
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<400> 31  
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<210> 32  
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<400> 32  
cggaattcgt tatatagttt ttaaaaaaaaa 30

<210> 33  
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<220>  
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<400> 33  
cggaattcga ttataacac gatgcgggtg 30

<210> 34  
<211> 30  
<212> DNA  
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<220>  
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<400> 34  
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<210> 35  
<211> 30  
<212> DNA  
<213> Artificial

<220>  
<223> primer for PCR

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30

<400> 35  
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<210> 36  
<211> 28  
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<220>  
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28

<400> 36  
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<210> 37  
<211> 27  
<212> DNA  
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<220>  
<223> primer for PCR

27

<400> 37  
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<210> 38  
<211> 26  
<212> DNA  
<213> Artificial

<220>  
<223> primer for PCR

26

<400> 38  
gtcgacgaca cagccacgta cgaggt

<210> 39  
<211> 26  
<212> DNA  
<213> Artificial

<220>  
<223> primer for PCR

26

<400> 39  
atcgatagac tttctccgga tgagtg